

Effective Behaviour Intervention Using Situational Analysis: A Framework for Evidence-based Practice

SANDIAO SEBASTIAN

ABSTRAK

Kajian kes ini telah dijalankan di New Zealand dan melibatkan seorang murid yang mengidap Sindrom Smith-Magenis. Murid ini berumur enam tahun dan menghadiri Tahun Dua di sekolah rendah. Budak perempuan ini telah dirujuk untuk perkhidmatan pengurusan tingkahlaku kerana pihak sekolah dan ibubapanya gagal menguruskan masalah tingkahlakunya yang ekstrim. Rangkakerja analisis situasi digunakan untuk mengumpul data, membina pelan intervensi secara kolaboratif bagi bekerjasama dengan guru dan pengurusan sekolah untuk melaksanakan program intervensi. Hasil daripada intervensi ini adalah positif kerana banyak daripada masalah tingkahlaku yang ekstrim telah berkurang, dan pihak sekolah serta ibubapa budak ini merasa puashati dengan hasil positif ini. Model rangkakerja analisis situasi ini terbukti cekap dan dinamik.

INTRODUCTION

Situational analysis involves a systematic investigation of complex challenges or issues impacting on individuals and systems (Annan, 2005). There are several features that appear to make this approach unique by : (1) involving a collaborative, evidence-based decision-making involving all the participants through the engagement process, (2) respecting and involving all the participants is highly encouraged, (3) acknowledging the social construction of knowledge and understanding, (4) ascertaining elements of new solutions in existing situations, (5) giving high priority and recognising the importance of interaction between people and the multi-systems of their lives, (6) appreciating the dynamic nature of human performance, and (7) applying a systematic problem analysis procedure (Annan, 2005).

Situational analysis provides a framework for psychologists to manage difficult situations effectively by reducing the degree of complexity. The framework involves studying the environment which involves the individual or the whole school systems. It helps psychologists develop a clear sense of direction in practice, encourages real involvement of various people (trans-disciplinary) in the setting and provides a tool to determine that practice is guided by real knowledge or 'evidence'.

BACKGROUND TO THE CASE STUDY

The case study was undertaken by the writer (the case manager) when he served as a Special Education Adviser with the Ministry of Education Special Education (MOE), New Zealand and as a post-graduate student studying Educational Psychology with Massey University, New Zealand. (All names and

places have been changed to observe confidentiality). This case study used the situational analysis framework. The child, Cynthia, had the chromosomal disorder, Smith-Magenis Syndrome (SMS). This condition is a developmental disorder that affects many parts of the body. The main features of this condition include mild to moderate intellectual disability, prominent facial features, sleep disturbances and behavioural problems. This syndrome is due to an abnormality in the short (p)-arm of chromosome-17 and is sometimes called 17p-Syndrome. Cynthia was 6 years old and lived with her parents and three siblings. Sources of information were collected from school and home visits, interviews, observations and consultation meetings. The participants (team members) involved the class teacher, Special Education Needs Coordinator (SENCO), teacher aides, the principal of the school, Cynthia and her parents. An occupational therapist and a speech therapist were also involved in the consultation.

REFERRAL

The referral was made by Lucy Fleming (Special Education Needs Coordinator, SENCO: Kingston Primary). The referral was about Cynthia's difficult behaviour in school. Behaviour concerns were as follows:

- Physical aggression: hitting/pulling/pushing
- Screaming
- Non-compliance: refusing to listen/carry out instruction
- Damage to property: scribbling on table, tearing books, *etc.*
- Self-injurious
- Removing her clothes in public

BACKGROUND

Cynthia had moderate level Smith-Magenis Syndrome (SMS). In addition, she had global developmental delay and communication difficulty (based on school reports). Related to this condition, Cynthia also experienced behaviour problems, sleep difficulty and physical aggression (Individualised Education Plan). In pre-school, Cynthia had 1:1 assistance and a lot of hand-over-hand support, modeling and repetition in various settings. At Kingston Primary in 2008, she was in the SENCO's new entrant class. This year (2009), Cynthia was in a new class (Year Two) and Elizabeth was the new teacher. The SENCO withdrew Cynthia for individual work (literacy and numbers) on a regular basis. Cynthia also received support from a Speech and Language Therapist and an Occupational Therapist from MOE. Cynthia was on the *Ongoing Resources and Reviewable Scheme (ORRS) - High Needs Category*.

Dimensions

Smith-Magenis Syndrome and Global Developmental Delay

Cynthia's moderate SMS condition influenced her behaviour and educational performance. It is important that there are behavioural supports and a structured learning programme for her optimal performance. Based on the Woodcock-Johnson Cognitive Abilities Test III (2000), Cynthia achieved a below average age (approximately 2 years below her actual age). Apart from receiving support from a Speech and Language Therapist and an Occupational Therapist from MOE, the Individual Education Plan (IEP) team of the school met twice a year to monitor and review Cynthia's educational performance and ongoing needs. Application for assistive technology support to assist Cynthia in her writing activity was also in process. Cynthia's mother, Judy, had informed that Cynthia had sleeping difficulty and that could be impacting on her well-being at school. At home and at school, Cynthia could have a meltdown-throwing tantrums, injuring herself and removing her clothes.

Acting out Behavior

Cynthia has difficulty coping when attention is not directed to her and may choose to react by pushing, pulling or hitting other children, screaming or being non-compliant.

Cynthia had been very physical with other children, especially when she did not get attention from her class teacher or teacher aide, Shirley (class teacher and teacher aide interviewed on 18/03/09). When Cynthia was attended to, she would be cooperative and respond to work. Demanding adult attention frequently appears to be common a feature of children with SMS. When Cynthia wanted an item or chose to do an activity other than what was expected by her mother, class teacher or teacher aide, she would just go ahead and satisfy her desire (observations on 18/03/09, 09/04/09). When she was asked to stop or was redirected to another activity, she reacted for example, by screaming, pushing a child nearby or damage property like tearing off pages of books or/and posters on the wall (teacher aide interview on 18/03/09). These types of behaviour occurred five to six times a week (observation and teacher data collection). Cynthia's mother also reported similar behaviour patterns at home (IEP meeting on 03/03/09). According to her, Cynthia would request for an item and want it immediately. When this was not attended to and even after an explanation, she would resort to throwing things around, hitting herself (self-injurious) or hitting her brother (interview and data notes from the mother on 24/02/09).

Sleeping Difficulty

Cynthia's sleeping difficulty could be a contributing factor to her inability to focus and manage her behaviour in school.

When Cynthia did not sleep well at home, she came to school tired and would be easily irritable. Her mother reported that there was no hard data around this yet as it would be difficult monitoring Cynthia's sleep. On average, Cynthia did

have a good sleep two or three nights per week. There were nights when she did notice Cynthia having difficulty sleeping and saw her coming out of her room, or at times found her playing computer games (telephone conversation with the mother on 22/04/09).

Transition Difficulty

As Cynthia was then in a new class and with a new teacher, more time was required to adjust to the environment.

When Cynthia was in the new entrant class last year, there were behavioral difficulties and adjusting problems during the first term. Cynthia slowly adjusted to the class with specific strategies (positive relationship, visual schedules/social story, sensorial learning) put in place by the class teacher. However, there were mild, ongoing behavioural issues throughout the year (SENCO interview - 09/04/09). The observations of the CM in the classroom showed that Cynthia had difficulties coping in the present class with routine and tasks. Time on mathematics and individual work would be difficult for Cynthia when attention was not directed to her and when there were other distractions in the class (teacher aide observations on 03/03/09). As Cynthia was low functioning, she might have difficulties coping with frequent changes to routine and expectations (Taylor & Oliver, 2008). When work is highly structured and there is adult guidance, Cynthia would cooperate and complete her tasks (SENCO interview on 09/04/09). [Although, there was a home-school diary in place, this medium was not efficiently used for the purpose yet (telephone conversation with the mother on 22/04/09)].

ANALYSIS

The main influences that impact on Cynthia's behavioural difficulty in school are difficulty adjusting to the class rules, school work, daily routine and relating to adults. The acting out behaviour is her way of showing her discomfort, frustration and finding some balance. Children with SMS may have difficulties adjusting to new environments, routines and persons. Nevertheless, with appropriate classroom strategies, many of the difficult behaviours can be managed well. Cynthia's sleeping difficulty would require proper investigation. The SENCO and Cynthia's mother had mentioned about Cynthia's tiredness at home and at school. Sleep difficulty could be a contributing factor towards her difficult behaviour.

Guiding Principles for Intervention

Cynthia's acting out behaviour seemed likely to be a result of her tiredness, transitioning difficulty and coping with the expectations in class. Whilst there was support around her, the expectations and dynamics in the learning environment continued to challenge her possibly causing behaviour difficulty (limited emotion regulation skills) on a daily basis (Givler, 1994). Studies show that children with moderate and severe needs will do well in calm and predictable situations (Udwin, 2002; Fidler, Philofsky & Hepburn, 2006).

Finding a sleep solution is essential as sleep deprivation increases difficult behaviour and possibly decreases ones ability to cope (Beall, 2005). Givler and Finucane (1995) suggest that a calm and consistent classroom, small class size, reinforcers and motivators, and behavioural interventions can help children achieve their potential.

Prioritisation of Dimensions

After discussion with the SENCO, the class teacher and the mother (on 09/04/09), it was felt that the acting out behaviour and sleep difficulties would be the dimensions for intervention. The dimension on transitioning is subsumed under the above two dimensions.

THE INTERVENTION PROGRAMME

The intervention planning meeting was held on 30/04/09 and all the team members were present. At this meeting, Cynthia's mother gave more information and data on Cynthia's sleep difficulty. The two-week-data provided information to confirm that Cynthia had ongoing sleep difficulty. After a lengthy and active discussion, team members agreed to the intervention plan suggested below:

1. Creating a Responsive Environment for Cynthia to Successfully Access the Curriculum

Hypothesis:	Work targets at Cynthia's level and a deeper understanding of her challenging needs to decrease her acting out behaviour.
Objective:	To reduce acting out behaviours from six to three times a day, that is about 50% reduction in three months.
Rationale:	To reduce difficult behaviour, the environment and work level should be sensitive and responsive to Cynthia's needs.
Programme:	<p>Provide lots of praises/reinforcement for good behaviour when there are less outbursts, being very cooperative when asked to do a task, waiting patiently with hand held up for help, following instructions with adult support. Use reward charts so that Cynthia can visually track her progress.</p> <p>As there already is an individualised education plan in place, this should be carefully followed and monitored. Cynthia's assigned tasks should be made achievable with adult support (including specialists' contribution from MOE). Suitable assistive technology support, which is in process now, will further compliment her success in her work.</p> <p>Provide feedback or manage her behaviour through calm modeling using a neutral emotional tone. For</p>

	<p>example, when Cynthia seeks attention, the teacher might try to continue talking to the class and re-direct her back to her seat without physically reprimanding her. If a calm tone is consistently set early on, there may be fewer outbursts over time, and Cynthia may realise that she is not successful in upsetting the teacher. Use distractors to diffuse any imminent outbursts for example, go for a walk with another person, sing your instructions, send them on an errand, or simply wait as sometimes, just waiting a moment and being silent can calm them down.</p> <p>When there is a full blown outburst, the teacher could try the following:</p> <p>Use time-out: send her for a walk with an adult.</p> <p>Active ignoring: you are close by, preventing as much danger and destruction as possible but do not give eye contact.</p> <p>Control your voice and body language, show no emotion (boredom).</p> <p>Do not interact: do not argue, do not answer questions, do not repeat instructions.</p> <p>Provide recovery time: let her rest, eat something or play on the computer.</p>
Person(s) responsible	Elizabeth (class teacher), Judy (mother), Shirley (teacher aide), Lucy (SENCO)
Resources:	Strategies for teaching children with moderate and severe needs, copies to be given to the school and to the mother; Assistive technology: Alpha Smart (software) will be used in school and at home.
Outcome Measure(s):	<p>Brief discussions will be held every fortnight for the next two months to monitor and review progress and strategies.</p> <p>Post-data collection to record the frequency of the behavioural concerns made in the referral (acting out behaviours) - Quantitative measure.</p> <p>The teacher aide will keep incident record information and related data as required by the CM - Qualitative measure.</p> <p>The CM will continue to observe Cynthia and support the class teacher, the SENCO and Cynthia's mother with resources and also coordinate specialist support from MOE (SLT and OT).</p> <p>Cynthia's mother will continue to inform and share information about Cynthia's behaviour at home. Use the home-school diary and implement appropriate strategies at home.</p>

2. Investigate the Need to Manage Cynthia's Sleeping Behavior

Hypothesis:	Coming to school having slept well will contribute to Cynthia's well-being and cooperation in school.
Objective:	To increase Cynthia's ability to sleep well.
Rationale:	Getting enough sleep is a critical factor in enabling Cynthia to be successful in school and at home.
Programme:	<p>The mother to consult the Pediatrician about Cynthia's sleeping difficulty.</p> <p>The mother to keep a record of Cynthia's sleeping behaviour for the next one month and also inform the school through the home-school diary when Cynthia has disturbed sleep.</p> <p>At school, the teacher and support staff are to monitor and record Cynthia's behaviour (tiredness, signs of lack of sleep).</p> <p>The school to organise sleep time if required (10-15 minutes) as per discussion at IEP meeting (09/03/09).</p>
Person(s) responsible:	Cynthia's mother, class teacher, teacher aide, SENCO.
Resources:	Article on sleep disorders and management in children with special needs. Copies to be given to the school and Cynthia's mother.
Outcome measure(s):	<p>Obtain data from the mother on Cynthia's quality of sleep - Quantitative measure. Two-week-data collection by the mother discussed at this meeting. Data collection to continue for the next month.</p> <p>Obtain data from the school on Cynthia's level of tiredness over one month.</p> <p>Monitor progress on medical intervention.</p> <p>Progress and effectiveness on sleep arrangements in school.</p>

PROGRESS

After one month of intervention and based on the data collected from the team members, it was apparent that Cynthia was making progress. Her behavioural difficulties had decreased by 50%. There was less outbursts in the classroom and Cynthia was staying on tasks more consistently. Her mother reported that Cynthia was sleeping satisfactorily after her visits to the pediatrician and was taking medication. One of the key factors that contributed to the present success is collaborative and consultative work that was undertaken throughout this case study. Another factor is making professional resources available and using evidence-base

CONCLUSION

The above case study used the situational analysis approach which is a particular style of research and practice that is ecological, collaborative, evidence-based and constructive (Annan, 2005). This approach locates issues of concern in the interaction between people and the multi-systems of the world rather than the individuals. Thus, the individual may not be the main concern but all the factors in the environment that impacts on the individual are. According to Annan (2005), situational analysis is designed to support educational psychologists to work collaboratively within the wide and complex environments of the situations that they are engaged in. This case study provides an example of how this framework could be applied. The situational analysis framework is systematic and provides a sense of common direction and teamwork towards agreed goals.

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